

## RAW SEQUENCE LISTING

DATE: 10/18/2001

PATENT APPLICATION: US/09/964,899

TIME: 09:35:48

Input Set : A:\Seqlist.txt

Output Set: N:\CRF3\10182001\I964899.raw

**ENTERED**

4 <110> APPLICANT: Cohen, Dalia et al.  
7 <120> TITLE OF INVENTION: Identification of Genes Involved in  
8 Alzheimer's Disease Using Drosophila Melanogaster  
11 <130> FILE REFERENCE: 4-31612 A  
C--> 13 <140> CURRENT APPLICATION NUMBER: US/09/964,899  
C--> 13 <141> CURRENT FILING DATE: 2001-09-27  
13 <150> PRIOR APPLICATION NUMBER: 60/236,893  
14 <151> PRIOR FILING DATE: 2000-09-29  
16 <150> PRIOR APPLICATION NUMBER: 60/298,309  
17 <151> PRIOR FILING DATE: 2001-06-14  
19 <160> NUMBER OF SEQ ID NOS: 53  
21 <170> SOFTWARE: FastSEQ for Windows Version 4.0  
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24 <211> LENGTH: 123  
25 <212> TYPE: DNA  
26 <213> ORGANISM: Homo Sapien  
28 <400> SEQUENCE: 1  
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30 gcagaagatg tgggttcaaa caaagggtgca atcattggac tcatggtggg cgggtgttgtc 120  
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33 <210> SEQ ID NO: 2  
34 <211> LENGTH: 129  
35 <212> TYPE: DNA  
36 <213> ORGANISM: Homo Sapien  
38 <400> SEQUENCE: 2  
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40 gcagaagatg tgggttcaaa caaagggtgca atcattggac tcatggtggg cgggtgttgtc 120  
41 atagcgtag 129  
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44 <211> LENGTH: 300  
45 <212> TYPE: DNA  
46 <213> ORGANISM: Homo Sapien  
48 <400> SEQUENCE: 3  
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50 gcagaagatg tgggttcaaa caaagggtgca atcattggac tcatggtggg cgggtgttgtc 120  
51 atagcgacag tgatcgatcat caccttggtg atgctgaaga agaaacagta cacatccatt 180  
52 catcatggtg tgggtggaggt tgacgccgct gtcaccccag aggagcgcca cctgtccaag 240  
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55 <210> SEQ ID NO: 4  
56 <211> LENGTH: 300  
57 <212> TYPE: DNA  
58 <213> ORGANISM: Homo Sapien  
60 <400> SEQUENCE: 4  
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62 gcagaagatg tgggttcaaa caaagggtgca atcattggac tcatggtggg cgggtgttgtc 120  
63 atagcgacag tgatcatcat caccttggtg atgctgaaga agaaacagta cacatccatt 180  
64 catcatggtg tgggtggaggt tgacgccgct gtcaccccag aggagcgcca cctgtccaag 240

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65 atgcagcaga acggctacga aaatccaacc tacaagttct ttgagcagat gcagaactag      300
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68 <211> LENGTH: 72
69 <212> TYPE: DNA
70 <213> ORGANISM: Homo Sapien
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73 atggcgcagt tcctgagact ttgcatctgg ctgctagcgc ttgggtcctg cctcctggct      60
74 acagtgcagg ca                                     72
76 <210> SEQ ID NO: 6
77 <211> LENGTH: 1537
78 <212> TYPE: DNA
79 <213> ORGANISM: Homo Sapien
81 <400> SEQUENCE: 6
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83 agggagagccc cccggccggc tgccagaaga tcccggcggg aggaagccca agtgtcactt      120
84 gaattccacc caaggagcgg gcgcctggga tcagagcgtc ctgttttagca ataacggctg      180
85 gagcacgtcc tacaagttac gggagagtcg gctgtgaagg agacgttcgc ttatccccctg      240
86 tgtccccgct cctggccccct ccagaccccc gccttgccct gcgctgggag gggagatcca      300
87 gaatgaaagg caagaaaggt attgttgcag catctggcag tgagactgag gatgaggaca      360
88 gcatggacat tcccttggac ctttcttcat ccgctggctc aggcaagaga aggagaaggg      420
89 gcaacctacc caaggagtct gtgcagattc ttcgggattg gctgtatgag caccgttaca      480
90 atgcctatcc ttcagagcaa gaaaaagcgt tgctgtccca gcaaacacac ctgtctacgc      540
91 tacaggctctg taactggttc atcaacgccc gccgcaggct cctccctgac atgctgagaa      600
92 aggatggcaa agatccaaat cagttcacaa tttcccgcgg tggggccaag atttctgaaa      660
93 cgagctctgt ggagtcctgt atgggcatca aaaacttcat gccagctcta gaggagaccc      720
94 catttcattc ctgtacagct gggccaaacc caaccctagg gaggccactg tctcctaagc      780
95 cgtcaccccc gggatcagtt ttggctcgtc catcagtgat ctgccatacc actgtgactg      840
96 cattgaaaga tgtccctttc tctctctgcc agtcggctcg tgtgggacaa aacacagata      900
97 tacagcagat agcggccaaa aacttcacag acacctctct catgtaccca gaggacactt      960
98 gtaaatctgg accaagtacg aatacacaga gtggtctttt caacactcct cccctactc      1020
99 caccggacct caaccaggac ttcagtggat ttcagcttct agtggatggt gcactcaaac      1080
100 gggctgcaga gatggagctt caggcaaaac ttacagctta acccattttc aagcaaaaca      1140
101 gttctcagaa atgtcatgat tgccggggtg aaggcaagag atgaattgca ttattttata      1200
102 tattttttat taatatattgc acatgggatt gctaaaacag cttcctgtta ctgagatgtc      1260
103 ttcaatggaa tacagtcatt ccaagaacta taaacttaaa gctactgtag aaacaaaggg      1320
104 ttttcttttt taaatgtttc ttggtagatt attcataatg tgagatggtt cccaatatca      1380
105 tgtgattttt tttttcctcc ccttcccttt ttttgttatt ttttcagact gtgcaatact      1440
106 tagagaacct atagcatctt ctcatcccca tgtggaacag gatgccaca tactgtctaa      1500
107 ttaataaatt ttccattttt tttcaaacaa gtatgaa                                     1537
109 <210> SEQ ID NO: 7
110 <211> LENGTH: 332
111 <212> TYPE: PRT
112 <213> ORGANISM: Homo Sapien
114 <400> SEQUENCE: 7
115 Ile Pro Pro Lys Glu Arg Ala Pro Gly Ile Arg Ala Ser Cys Leu Ala
116 1          5          10          15
117 Ile Thr Ala Gly Ala Arg Pro Thr Ser Tyr Gly Arg Val Gly Cys Glu
118          20          25          30
119 Gly Asp Val Arg Leu Ser Pro Val Ser Pro Leu Leu Ala Pro Pro Asp

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120          35          40          45
121 Pro Arg Leu Ala Ser Arg Trp Glu Gly Arg Ser Arg Met Lys Gly Lys
122          50          55          60
123 Lys Gly Ile Val Ala Ala Ser Gly Ser Glu Thr Glu Asp Glu Asp Ser
124 65          70          75          80
125 Met Asp Ile Pro Leu Asp Leu Ser Ser Ser Ala Gly Ser Gly Lys Arg
126          85          90          95
127 Arg Arg Arg Gly Asn Leu Pro Lys Glu Ser Val Gln Ile Leu Arg Asp
128          100          105          110
129 Trp Leu Tyr Glu His Arg Tyr Asn Ala Tyr Pro Ser Glu Gln Glu Lys
130          115          120          125
131 Ala Leu Leu Ser Gln Gln Thr His Leu Ser Thr Leu Gln Val Cys Asn
132          130          135          140
133 Trp Phe Ile Asn Ala Arg Arg Arg Leu Leu Pro Asp Met Leu Arg Lys
134 145          150          155          160
135 Asp Gly Lys Asp Pro Asn Gln Phe Thr Ile Ser Arg Arg Gly Ala Lys
136          165          170          175
137 Ile Ser Glu Thr Ser Ser Val Glu Ser Val Met Gly Ile Lys Asn Phe
138          180          185          190
139 Met Pro Ala Leu Glu Glu Thr Pro Phe His Ser Cys Thr Ala Gly Pro
140          195          200          205
141 Asn Pro Thr Leu Gly Arg Pro Leu Ser Pro Lys Pro Ser Ser Pro Gly
142          210          215          220
143 Ser Val Leu Ala Arg Pro Ser Val Ile Cys His Thr Thr Val Thr Ala
144 225          230          235          240
145 Leu Lys Asp Val Pro Phe Ser Leu Cys Gln Ser Val Gly Val Gly Gln
146          245          250          255
147 Asn Thr Asp Ile Gln Gln Ile Ala Ala Lys Asn Phe Thr Asp Thr Ser
148          260          265          270
149 Leu Met Tyr Pro Glu Asp Thr Cys Lys Ser Gly Pro Ser Thr Asn Thr
150          275          280          285
151 Gln Ser Gly Leu Phe Asn Thr Pro Pro Pro Thr Pro Pro Asp Leu Asn
152          290          295          300
153 Gln Asp Phe Ser Gly Phe Gln Leu Leu Val Asp Val Ala Leu Lys Arg
154 305          310          315          320
155 Ala Ala Glu Met Glu Leu Gln Ala Lys Leu Thr Ala
156          325          330

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158 &lt;210&gt; SEQ ID NO: 8

159 &lt;211&gt; LENGTH: 1053

160 &lt;212&gt; TYPE: DNA

161 &lt;213&gt; ORGANISM: Homo Sapien

163 &lt;400&gt; SEQUENCE: 8

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164 gtggtgcgaa tcctggagcg gcaaggccct cgggcagctc ctgggggtgc agacgatctc      60
165 agtgctgtgc gcaaccacac ttaccagatg ttgacactgc tggcagagga ccgtgcagtt      120
166 ccctcgcccc ccacaggccc tgggccctcg ctggagtttg ctctgcacga ggatctgctg      180
167 acccgtgtgt tgacatggca gctgcaatgg gatgagcttg gggatggggg cgaggaacgg      240
168 cgggctgagc aactgaaact attgaaatg ctagtgagcg aagctcgcca gccactgttg      300
169 cggcatggtc cagttcgtga ggctctgctc accctgctgg atgacctgtg ccgccctgtg      360
170 cccagtagcc cagcactgga tgaaggcttg gtgctacttc tcagccagct gtgtgtttgt      420

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171 gtggcccagg agccttcatt gctcgagttc ttcctgcagc cacctcctga gcctggagcc 480
172 gctccccgtc ttctttctctt ttctgcctt gtcccttttg tgcacgcaga gggcacccctg 540
173 ggccagcagg cccgtgatgc cctacttctt ctcatggctt tgtcagctgg gagccccact 600
174 gtgggcccgt acatcgcgga tcaactttac ttctgccggg tgcctggccac agggctcagt 660
175 gccctgtact catcactgcc tcgaaagatt gaggttccag gggatgattg gcactgtctg 720
176 cgacgggaag actggtctggg agtgccagcc cttgcactct tcatgagttc cctggagttc 780
177 tgcaatgcag taattcaggt ggctcaccct ctggtgcaga agcagttggt tgattatata 840
178 cataatgggt tcctggtgcc tgtcatgggt cctgccttgc acaagacctc tgtggaggag 900
179 atgatcgcca gtaccgccta cctggaactt ttctacgga gtatctcaga gcctgctttg 960
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184 <211> LENGTH: 351
185 <212> TYPE: PRT
186 <213> ORGANISM: Homo Sapien
188 <400> SEQUENCE: 9
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190 1 5 10 15
191 Ala Asp Asp Leu Ser Ala Val Arg Asn His Thr Tyr Gln Met Leu Thr
192 20 25 30
193 Leu Leu Ala Glu Asp Arg Ala Val Pro Ser Ala Pro Thr Gly Pro Gly
194 35 40 45
195 Pro Leu Leu Glu Phe Ala Leu His Glu Asp Leu Leu Thr Arg Val Leu
196 50 55 60
197 Thr Trp Gln Leu Gln Trp Asp Glu Leu Gly Asp Gly Val Glu Glu Arg
198 65 70 75 80
199 Arg Ala Glu Gln Leu Lys Leu Phe Glu Met Leu Val Ser Glu Ala Arg
200 85 90 95
201 Gln Pro Leu Leu Arg His Gly Pro Val Arg Glu Ala Leu Leu Thr Leu
202 100 105 110
203 Leu Asp Ala Cys Gly Arg Pro Val Pro Ser Ser Pro Ala Leu Asp Glu
204 115 120 125
205 Gly Leu Val Leu Leu Leu Ser Gln Leu Cys Val Cys Val Ala Gln Glu
206 130 135 140
207 Pro Ser Leu Leu Glu Phe Phe Leu Gln Pro Pro Pro Glu Pro Gly Ala
208 145 150 155 160
209 Ala Pro Arg Leu Leu Leu Phe Ser Arg Leu Val Pro Phe Val His Arg
210 165 170 175
211 Glu Gly Thr Leu Gly Gln Gln Ala Arg Asp Ala Leu Leu Leu Leu Met
212 180 185 190
213 Ala Leu Ser Ala Gly Ser Pro Thr Val Gly Arg Tyr Ile Ala Asp His
214 195 200 205
215 Ser Tyr Phe Cys Pro Val Leu Ala Thr Gly Leu Ser Ala Leu Tyr Ser
216 210 215 220
217 Ser Leu Pro Arg Lys Ile Glu Val Pro Gly Asp Asp Trp His Cys Leu
218 225 230 235 240
219 Arg Arg Glu Asp Trp Leu Gly Val Pro Ala Leu Ala Leu Phe Met Ser
220 245 250 255
221 Ser Leu Glu Phe Cys Asn Ala Val Ile Gln Val Ala His Pro Leu Val

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222          260          265          270
223 Gln Lys Gln Leu Val Asp Tyr Ile His Asn Gly Phe Leu Val Pro Val
224          275          280          285
225 Met Gly Pro Ala Leu His Lys Thr Ser Val Glu Glu Met Ile Ala Ser
226          290          295          300
227 Thr Ala Tyr Leu Glu Leu Phe Leu Arg Ser Ile Ser Glu Pro Ala Leu
228 305          310          315          320
229 Leu Arg Thr Phe Leu Arg Phe Leu Leu Leu His Arg His Asp Thr His
230          325          330          335
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232          340          345          350
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235 <211> LENGTH: 1425
236 <212> TYPE: DNA
237 <213> ORGANISM: Homo Sapien
239 <400> SEQUENCE: 10
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242 gggccacact gatccgcata cctcttcata gagtccaacc tggacgcagg atcctgaacc 180
243 tactgagggg atggagagaa ccagcagagc tccccaaagt gggggcccca tcccctgggg 240
244 acaagcccat ctctgtacct ctctcgaaat acagggatgt gcagtatttt ggggaaattg 300
245 ggctgggaac gcctccacaa aacttcactg ttgcctttga cactggctcc tccaatctct 360
246 gggctccgtc caggagatgc cacttcttca gtgtgccctg ctggttacac caccgatttg 420
247 atcccaaagc ctctagctcc ttccaggcca atgggaccaa gtttgccatt caatatggaa 480
248 ctgggcgggt agatggaatc ctgagcgagg acaagctgac tattggtgga atcaaggggtg 540
249 catcagtgat ttctggggag gctctctggg agcccagcct ggtcttcgct ttgcccatt 600
250 ttgatgggat attgggcctc ggttttccca ttctgtctgt ggaaggagtt cggcccccga 660
251 tggatgtact ggtggagcag gggctattgg ataagcctgt ctctcctttt tacctcaaca 720
252 gggaccctga agagcctgat ggagcagagc tggctcctgg gggctcggac ccggcacact 780
253 acatcccacc cctcaccttc gtgccagtca cggccccgc ctactggcag atccacatgg 840
254 agcgtgtgaa ggtgggcccc gggctgactc tctgtgccaa gggctgtgct gccatcctgg 900
255 atacgggcac gtccctcata acaggaccca ctgaggagat ccggggccctg catgcagcca 960
256 ttgggggaat ccccttgctg gctggggagt acatcatact gtgctcggaa atcccaaagc 1020
257 tccccgcagt ctcttccctt cttggggggg tctggtttta cctcacggcc catgattacg 1080
258 tcatccagac tactcgaaat ggcgtccgcc tctgcttgct cggtttccag gccctggatg 1140
259 tccctccgcc tgcagggcc ttctggatcc tcggtgacgt cttcttgggg acgtatgtgg 1200
260 ccgtcttoga ccgcggggac atgaagagca gcgccgggt gggcctggcg cgcgctcgca 1260
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263 tatttccatt gagcgaaaaa aaaaaaaaaa aaaaaaaaaa atcaa 1425
265 <210> SEQ ID NO: 11
266 <211> LENGTH: 433
267 <212> TYPE: PRT
268 <213> ORGANISM: Homo Sapien
270 <400> SEQUENCE: 11
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273 Pro Pro Leu Leu Gln Pro Leu Leu Leu Leu Pro Leu Leu Asn Val
274          20          25          30

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→ Use of n and / or Xaa has been detected in the Sequence Listing. Review the Sequence Listing to ensure a corresponding explanation is present in the <220> to <223> fields of each sequence using n or Xaa.

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L:13 M:270 C: Current Application Number differs, Replaced Current Application No

L:13 M:271 C: Current Filing Date differs, Replaced Current Filing Date

L:675 M:341 W: (46) "n" or "Xaa" used, for SEQ ID#:18

L:755 M:341 W: (46) "n" or "Xaa" used, for SEQ ID#:19

L:1483 M:341 W: (46) "n" or "Xaa" used, for SEQ ID#:31